

magnificent birds, and I am sanguine about getting them home. As soon as they are shipped I will advise you, and enclose you the captain's receipt, so that you will be able to cover the risk. Most of the Pheasants come here from a distance of 200 miles, from the mountain-range near Tamsuy. I have spared no labour in getting them; and as they appear pretty hardy birds, there is no reason why they should not reach home. I am also trying to get a couple of females of *Cervus swinhoii*, and live specimens of the *Capricornis*, the Bear, and the Leopard."

"Takow, July 25, 1865.

"From some Chinese notes which I have lately been reading on the Zoology of Formosa, I learn of the existence here of some animals to me hitherto unknown,—among others a Porcupine and a wild *Bos* which occurs in herds of hundreds and thousands. I think in this last I shall discover the wild stock of the small Yellow Cow of South China. I shall spare no pains, you may be sure, to investigate this interesting fact."

"Takow, Formosa, 8th August, 1865.

"Chinese books tell of a Porcupine that occurs in this island. I have not yet seen it, but I suspect it will be the same as that found throughout India and in South China. In Mammals all that I have lately secured are several specimens of the pretty *Kerivoula* Bat, and a nearly unicolor variety of the Red-bellied Squirrel, *Sciurus erythræus*, from the southern mountains. In birds I have lately got several examples of the Green Dove (male and female), my *Sphenocercus formosæ*, and a skin of the *Pitta oreas*. The latter I got before from the northern mountains; my latest acquisition shows the species to extend also to the south."

The following papers were read:—

1. A REVISION OF THE SPECIES OF GOLDEN MOLES (CHRYSOCHLORIS). BY DR. JOHN EDW. GRAY, F.R.S., V.P.Z.S.

Several species of Golden Moles have been described by various zoologists on specimens procured from different parts of Africa—the size and form of the muffle, the size and form of the claws, and slight differences in the colour of the fur being regarded as sufficient to separate the species. I have examined the large series of specimens which is contained in the British Museum, received from various parts of Africa, and I find that the form of the muffle greatly depends on the art, or amount of care on the part of the persons who skinned and stuffed the specimens, and that its form can be altered at pleasure. The form of the claws of the front feet seems to vary according to the age, and probably also according to the sex of the specimens; but unfortunately the sex is seldom marked on the specimens in Museums.

The general colour and, especially, the distinctness of the white and dark marks on the head seem to vary greatly in specimens from the same locality. Moreover this animal is often put into spirits on

account of the brilliant colours which it exhibits when so preserved, and animals so preserved are sometimes taken out and stuffed. Specimens which have been so treated have a very different appearance from those which have been skinned fresh and the skins preserved dry, the colour being more or less changed according to the strength of the spirits or the length of the time that the animal may have been kept in the fluid.

I have carefully compared the series of skulls in the Museum, which have in most cases been extracted from the specimens which are preserved in the collection ; so that the results of this paper are founded on the comparison of the skulls as well as the skins in the Museum collection.

The specimens and skulls in the British Museum appear to be all referable to the two following species, and most easily separated by the character of the fur.

1. CHRYSOCHLORIS AURATA.

Fur short, very dense, erect, with more or less metallic reflections, brown ; sides of the face whitish ; the front claws subcylindrical.

Hab. South Africa.

This species varies in the extent and pureness of the white colour on the sides of the face and crown, and in the presence or absence of the intensity of the blackness on the forehead. The fur is much more iridescent when the specimens are preserved in spirits.

This species includes the *Ch. aurata* and *Ch. rubra* of Fischer, and the synonyma he attaches to these species ; and I am also inclined to refer to it *Ch. hottentotta*, A. Smith, *Ch. holosericea*, Licht., *Ch. albirostris*, *Ch. rutilans*, Wagner, and *Ch. damariensis*, Ogilby, which appear to have been bleached by exposure ; nor do I see any distinction to induce me to separate from it *Ch. obtusirostris*, Peters.

2. CHRYSOCHLORIS VILLOSA, A. Smith, South African Journal, ii. 33.

The fur elongate, very thick, coarse, villose, brown, with an abundant under-fur ; lips, chin, and streak from the angle of the mouth white ; the outer front claw rather large, broad, high ; the hind claws large.

Hab. South Africa : Natal.

This is considerably larger than the former species.

The examination of the skulls has helped me to this determination. I find that it has been supposed by some zoologists that I undervalue the study of fossil bones, or *Palæontology* as it is called ; as if the study of fossil bones were distinct from the study of osteology in general. Nothing can be more contrary to my feelings ; indeed I have been doing all I can for years to facilitate the study of fossils, as well as recent osteology, by forming a large collection of *well-determined* skeletons of vertebrated animals for the purpose. What I do object to is, that persons who pretend to be scientific men

should proceed to describe species of fossil animals without having properly studied the osteology of the recent species and the variations that the bones, teeth, horn, and other parts of the skeleton assume in the recent species, which they have the opportunity of studying in a more complete manner than they can have in the case of fossil species. More especially I object to the practice of such students as describe species of fossil animals from fragments, which it would be very unwise to declare to be distinct if they belonged to some recent species which there was an opportunity of examining in a complete state and of comparing with other skeletons of allied species. Yet many fossil species have been described from such specimens, so that our catalogues are thereby encumbered with useless names.

2. NOTE ON THE HABITS OF THE KINKAJOU (*CERCOLEPTES CAUDIVOLVULUS*). BY DR. J. E. GRAY, F.R.S., ETC.

The Kinkajou was formerly considered a Lemur, and the manner in which it uses its feet as hands might well mislead a casual observer. I saw one the other evening in the Zoological Gardens resting on its rump with the tail coming out in front between its hind legs. It was holding in its fore feet a slice of bread, and every now and then it would take off a piece with one or the other of its fore feet, and hold it as in a hand to its mouth, or take from it small pieces with the other hand like a child eating a cake, and quite as handily; yet this animal has no opposite thumb on any of the feet, and only short fingers and toes webbed nearly to the claws.

3. SUPPLEMENTARY NOTES ON THE MUSTELIDÆ.
BY DR. J. E. GRAY, F.R.S., ETC.

In my Revision of the *Mustelidæ* (P. Z. S. 1865, p. 100) I find that I neglected to give the external characters by which the two species of *Ratels* might be distinguished; they are as follows:—

Mellivora indica. Black; the back iron-grey; crown of the head white. India.

Mellivora capensis. Black; the back iron-grey; the crown and a broad stripe down each side of the back to the tail white. South Africa.

The latter species is easily known by the greater quantity of white on the head and the broad white lateral edge to the iron-grey colour on the back.

I take this opportunity of giving two illustrations of the skull of *Arctonyx collaris*, which should have accompanied my description of that species (*l. c.* p. 138).